warmhaus

# GLOWA

## QUICK COMMISSIONING GUIDE

# Step 1

## Visual Check

1-1




While all boiler valves are open, check the system pressure either from the bottom of the device or from the display screen. It should be between 1 - 1.50 bar. If the pressure is low, fill the system with water using the filling tap located under the device. To view the pressure value on the display, press and hold the On-Off button for 3 seconds.




1-2



Flue system is all connected, auto air vent in the boiler is open.

# Step 2

## Gas Pressure / Gas Rate

Remove the inlet test screw located at the bottom right-hand side of the gas valve as shown in the diagram and connect a suitable manometer. The gas pressure should be between 17–22 mbar for natural gas (optimum 20 mbar) and between 35–39 mbar for LPG (optimum 37 mbar). After the measurements are completed, reinstall the screw.

2-1



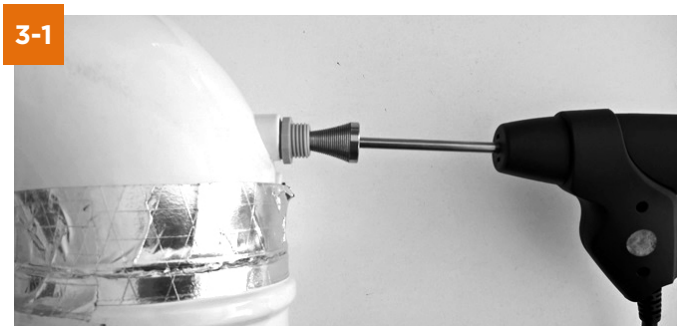
2-2



# Step 3

## Checking Combustion

3-1



Ensure the boiler front cover is fully fitted and enter the sweeper mode (as described in step 5). Run the appliance in both HIGH and LOW modes, and using a suitable flue gas analyser, measure the gases from the sample point located on the flue elbow/adapter (as shown in the picture).

3-2




The CO2 reading is the main measurement that is important in both HI and LO the optimum reading should be 9.0% C02, however with the tolerances it acceptable

# Step 4

## Deaeration Mode

**Put the boiler into this mode by carrying out the following steps:**

4-1




4-2




4-3




Air purge function is activated once after the below listed conditions: After each power is supplied to the control board - After each low water pressure error or high-water pressure error is cleared by normal water pressure detection - After each manual reset of high limit temperature protection lockout During air purge function lcd shows “AP” indication. Air purge function works for 160 seconds. Fan works at Ignition Fan Speed for 30 seconds. Pump is turned on for 15 seconds and turned off for 5 seconds. 3-way valve is positioned at CH position for 40 seconds and positioned to DHW position for 40 seconds. Air purge function can be skipped by pressing Reset button. The appliance performs these operations automatically.

# Step 5

## **Sweeper Mode** (Accessing via Button Combination)

5-1



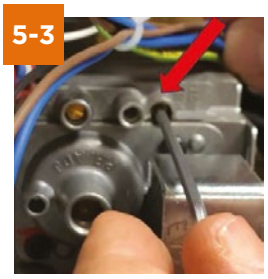

If the screen shown in the picture is not visible, press and hold the ON/OFF button for 3 seconds to ensure the temperature display appears. Then, connect the emission device as shown in Step 3. Press and hold the MODE button for 3 seconds to switch the system to DHW (Domestic Hot Water) mode. The DHW (Domestic Hot Water) and CH (Central Heating) knobs must be in the positions shown in the picture.

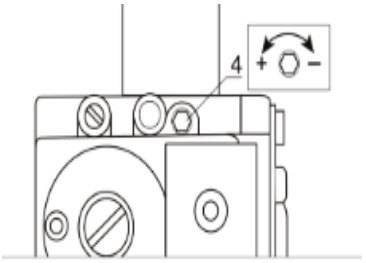
5-2




First, turn the DHW and CH knobs to their maximum positions. Then, press and hold the Mode and Reset buttons together for 3 seconds to access the Sweeper Mode. The screen will display ‘HI’. After allowing the appliance to run in HI mode (High Mode) for 3 minutes, measure the emission values as described in Step 3. The $CO_2$ level should be between 8.70% and 9.30%.

5-3





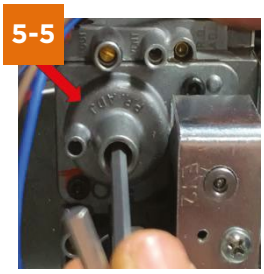

The maximum gas setting should be adjusted as shown in the diagram, based on the measured emission values. If the $CO_2$ value is low, turn in the positive (+) direction from the area indicated by the arrow in the diagram; if the $CO_2$ value is high, turn in the negative (–) direction to adjust the $CO_2$ levels.

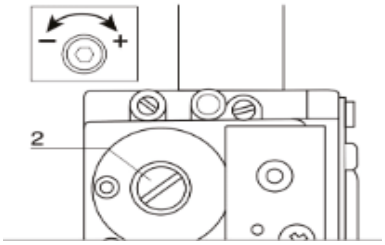
5-4




After completing the procedures in HI mode, turn the CH knob to the minimum position (as shown in the picture); the screen will display ‘Lo’. Allow the appliance to run in Lo mode (Low Mode) for 3 minutes, then measure the emission values as described in Step 3. The $CO_2$ level should be between 8.70% and 9.30%.

5-5






The minimum gas setting should be adjusted as shown in the diagram, based on the measured emission values. If the $CO_2$ value is low, turn in the positive (+) direction from the area indicated by the arrow in the diagram; if the $CO_2$ value is high, turn in the negative (–) direction to adjust the $CO_2$ levels.

After completing the adjustments in both High and Low modes, press the reset(R) button to exit and finish the process.

# Step 6 (Optional)

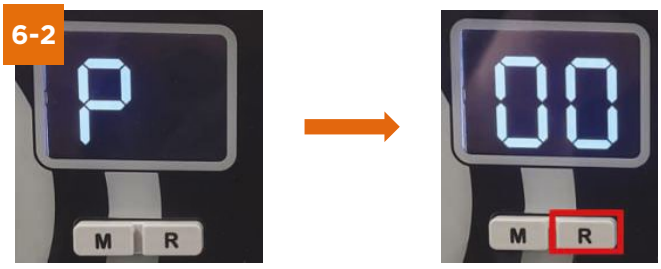
**Step 6 optional sweeper mode is an alternative to the Step 5 sweeper mode. It is accessed through the parameter menu. Both methods lead to the same result, and either one can be used as preferred.**

## **Sweeper Mode** (Access The System By Using The Parameter Combination)

6-1




6-2




Pressing Mode and Reset buttons together for 3 seconds, when DHW knob is in minimum position and CH knob is in minimum position, leads access to the sweeper mode. The screen will appear ‘P 00’.

6-3




After the P00 screen appears, press the RESET button 6 times to reach the P06 screen. To toggle between parameters; Press the MODE button (to decrease) and RESET button (to increase).

6-4




Press the On/Off button once to enter the parameter menu.

6-5




When the parameter menu is entered, the screen shown in the picture will appear. To toggle between parameters, press the MODE button to decrease and the RESET button to increase.

Auto Mode (00): No action is required in this mode. The appliance operates with modulation automatically.

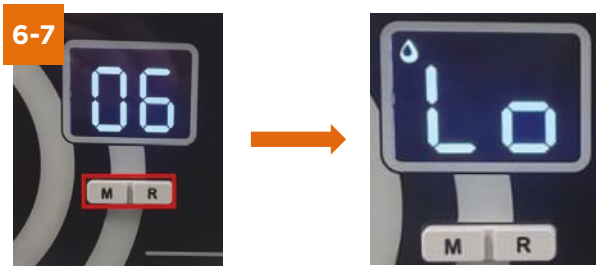
Auto Mode → 00 (modulated operating mode)
Low Mode → 01 (operating at minimum capacity)
High Mode → 02 (operating at maximum capacity)

6-6



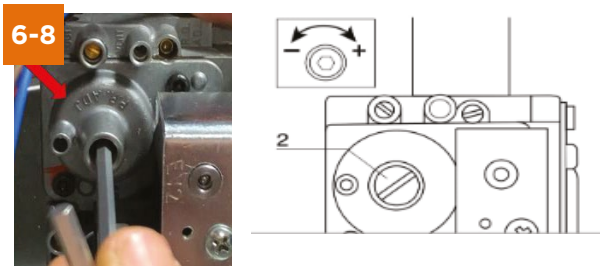

Press the RESET button once to switch to 01 (low mode). Then, press the On/Off button once to save the low mode setting. The system will automatically return to the P06 screen.

6-7




Press and hold the MODE and RESET buttons simultaneously for 3 seconds. The “Lo” symbol will appear on the display. Allow the appliance to run in this mode for 3 minutes, and during this time, connect the emission analyser to the flue as shown in Step 3 to measure the emission values. The $CO_2$ level should be between 8.70% and 9.30%.

6-8




The minimum gas setting should be adjusted as shown in the diagram, based on the measured emission values. If the $CO_2$ value is low, turn in the positive (+) direction from the area indicated by the arrow in the diagram; if the $CO_2$ value is high, turn in the negative (–) direction to adjust the $CO_2$ levels. After completing the adjustments, press the Reset button.

6-9

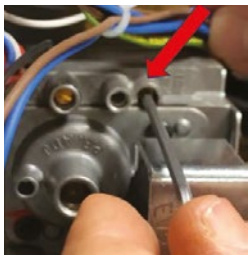


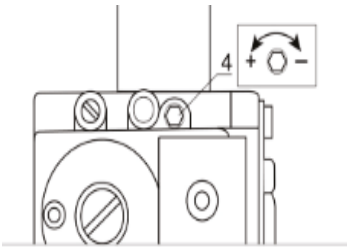

After the Low Mode adjustment is completed, the system will return to the screen shown in the picture. Steps 6-1, 6-2, 6-3, and 6-4 are repeated to reach the screen shown in Step 6-5. Press the Reset button twice to access the 02 (High Mode) screen, then press the On/Off button to reach the P06 screen.

6-10




Press and hold the MODE and RESET buttons simultaneously for 3 seconds. The “Hı” symbol will appear on the display. Allow the appliance to run in this mode for 3 minutes, and during this time, connect the emission analyser to the flue as shown in Step 3 to measure the emission values. The $CO_2$ level should be between 8.70% and 9.30%.






The maximum gas setting should be adjusted as shown in the diagram, based on the measured emission values. If the $CO_2$ value is low, turn in the positive (+) direction from the area indicated by the arrow in the diagram; if the $CO_2$ value is high, turn in the negative (–) direction to adjust the $CO_2$ levels. After completing the adjustments, press the Reset button.

**Put the boiler into SERVICEMAN by carrying out the following:**

**Wait for the circle to complete**

Replace the test point screw and test with suitable leak detection.



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